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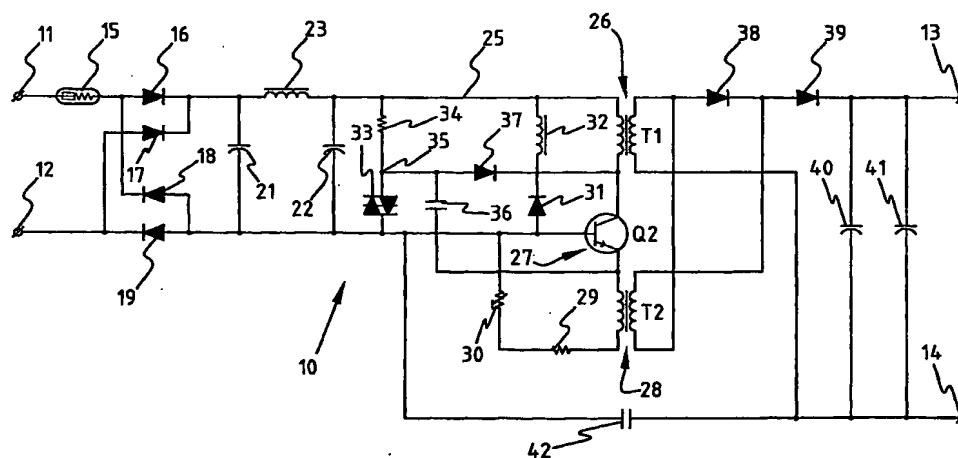
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(54) Title: **DEVICE AND METHOD FOR CONVERTING AN AC VOLTAGE**



(57) Abstract: The present invention relates to a device (10) for converting an AC voltage from the mains electricity supply into a DC voltage of predetermined level (and waveform), comprising: - a rectifier circuit (16, 17, 18, 19) for connecting to the mains electricity supply; - a switching circuit connected to the rectifier circuit; - a main transformer (26) connected to the switching circuit; and - an auxiliary transformer (28) which is connected to the switching circuit and the secondary winding of which is coupled to the secondary winding of the main transformer such that the current through the switching circuit and the main transformer is limited to a predetermined value.

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